

Machakos University

SCHOOL OF EDUCATION

DIPLOMA IN EDUCATION

CODE: UCU 010

TITLE: INTRODUCTION TO INFORMATION TECHNOLOGY

DATE:

TIME:

Instructions: Answer Question **ONE** and any other **TWO** Questions.

Question One [Compulsory, 30 Marks]

- a) i) Define the term file as used in computers and provide two examples. (4 Marks)
- ii) Outline three main functions of an operating system in the computer (3 Marks)
- iii) List two examples of operating system software (2 Marks)
- v) Assuming you want to print your document, which menu do you choose for 'print preview'? (1 Marks)
- b) i) Explain the term *data* as used in computers? (2 marks)
- ii) Operating systems typically provide each process with a virtual address space. Explain (3 Marks)
- c) i) Name and explain briefly three main types of computers. (6 Marks)
- ii) How is access control managed in Windows NT? (5 marks)
- iii) Differentiate between System Software and Application Software? (4 Marks)

Question Two [Optional, 20 Marks]

- a) i) Convert this binary number 101011_2 into decimal number. (3 marks)
- ii) Convert this decimal number 125_{10} into binary number. (3 Marks)
- b) i) What is the meaning of the abbreviation FIFO? (3 Marks)
- ii) State and explain three types of internet protocol (6 Marks)

iii) Explain what we mean by the word 'Operating System' and give four examples of the same. **(5 Marks)**

Question Three [Optional, 20 Marks]

a) i) Which binary number comes right after the binary number 101001?(**3 Marks**)

ii) Name and explain the main functions of the following;

CPU **(2 Marks)**

ALU **(2 Marks)**

ROM **(2 Marks)**

RAM **(2 Marks)**

iii) How many bits is a kilobyte?(**2 Marks**)

b) i) Describe what you understand by the term menu bar in MS Word. **(2 Marks)**

iii) Computers have evolved over a time since the first computer was manufactured. How many generations of computers have been encountered till today? Give a brief history of computer evolution. **(5 Marks)**

Question Four [Optional, 20 Marks]

a) i) Name and describe the main functions of a computer.(**5 Marks**)

ii) List three types of system software and Application Software. **(6 Marks)**

iii) Explain the meaning of the word application software in computers. **(2 Marks)**

b) i) Give four examples of output devices. **(4 Marks)**

c) i) Define the following words:

1. Computer

2. Hardware

3. Monitor **(3 Marks)**

Question Five [Optional, 20 Marks]

a) i) List and explain four parts of MSWord screen. **(8 Marks)**

ii) What are the main characteristics of a computer **(4 Marks)**

b) Explain the meaning of a computer virus and give two examples? **(3 Marks)**

c) Name and explain what the Future Holds for Computers in the society(**5 Marks**)